Sociocultural Factors in the Use of Prenatal Care by Hmong Women, Minneapolis

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ABSTRACT

Understanding the sociocultural context of prenatal care underuse by an immigrant population can suggest programmatic changes that result in more effective health care delivery. Ethnographic survey interviews of female Hmong clinic patients conducted in 1987/88 revealed that they objected to biomedical procedures and to being attended by several doctors; the women also reported poor communication with staff as a problem. Clinic reforms implemented in 1989/90 included hiring a nurse-midwife, reducing the number of pelvic examinations, expanding hours of operation, creating a direct telephone line to Hmong interpreters, and producing a Hmong-language prenatal health care education videotape. Women interviewed in 1993 reported a more positive clinic experience. (*Am J Public Health.* 1995;85:1015–1017)

Introduction

The underuse of prenatal health care by minority populations in the United States has been linked to neonatal morbidity and mortality.[1–4] Understanding the sociocultural context of such underuse by an immigrant population can suggest programmatic changes that result in more effective health care delivery. This paper elucidates the sociocultural contexts of prenatal care involvement of an urban Hmong population from 1984 to 1988, describes interventions that were implemented to provide a more positive clinic experience, and assesses those interventions.

Study Population

More than 26 000 Laotian Hmong refugees have settled in Minneapolis and St. Paul, Minn, since 1975. One facility that provides primary health care to Hmong is the Community-University Health Care Center/Variety Children's Clinic, a neighborhood-based, outreach clinic of the University of Minnesota Hospital and Clinic. The clinic provides affordable, accessible, and culturally acceptable care to an economically disadvantaged, ethnically heterogeneous population. Nineteen percent of clinic clients are Hmong, and an additional 14% are of other Southeast Asian origins. Interviews were conducted with two groups of Hmong women who had delivered infants at the university hospital and who had received all prenatal care for that pregnancy at the clinic.

Methods

Using standard anthropological methods, we constructed open-ended questionnaires, based on interviews with Hmong leaders and healers and clinic professionals, and administered them to women in their homes. Approval of the University of Minnesota's Institutional Review Board was obtained, and all subjects gave verbal informed consent.

Interviews were conducted during 1987/88 with 48 of the 92 women who had delivered infants between 1984 and 1988. The other 44 women were not interviewed because they could not be located (32), declined participation (9), or had been interviewed in prestudy interviews (3). Survey results guided reforms in 1989/90. In 1993, interviews were conducted with 18 of the 45 women who had delivered infants between July 1990 and June 1992. The remainder were not interviewed because they could not be located (14) or declined participation (13). The higher rate of refusal among the second cohort can be explained by the fact that 9 of the women who declined participation had recently participated in a family planning and contraceptive use study conducted by the clinic. Socioeconomic and demographic criteria revealed that women who were interviewed on both occasions were typical of the Hmong obstetric population served by the clinic (Table 1).

Interviews considered only the most recent pregnancy. The 1984 through 1988 group was interviewed between 1 month and 38 months (mean = 13 months) after delivery. Interviews of the 1990 through 1992 group occurred between 8 months and 30 months (mean = 19 months) after delivery. A limitation of the study is that the time between delivery and interview

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TABLE 1—Demographic Data for the Clinic's Hmong Obstetric Population

	1984 through 1988		1990 through 1992	
	Interviewed (n = 48)	Not Interviewed (n = 44)	Interviewed (n = 18)	Not Interviewed (n = 27)
Age, y, mean (SD)	27.0 (8.4)	26.1 (7.2)	27.8 (8.3)	27.2 (7.3)
US residency, y, mean (SD)	7.4 (2.5)	7.2 (1.4)	6.9 (4.1)	10.6 (4.6)
Married, %	92	93	94	83
Parity, mean (SD)	4.2 (2.6)	2.7 (2.0)	5.7 (2.6)	4.3 (2.8)
Monthly income, dollars, mean (SD)	893 (352)	852 (291)	879 (408)	857 (267)
Employed, %	35	12	28	37
Husband employed, %	60	83	41	53

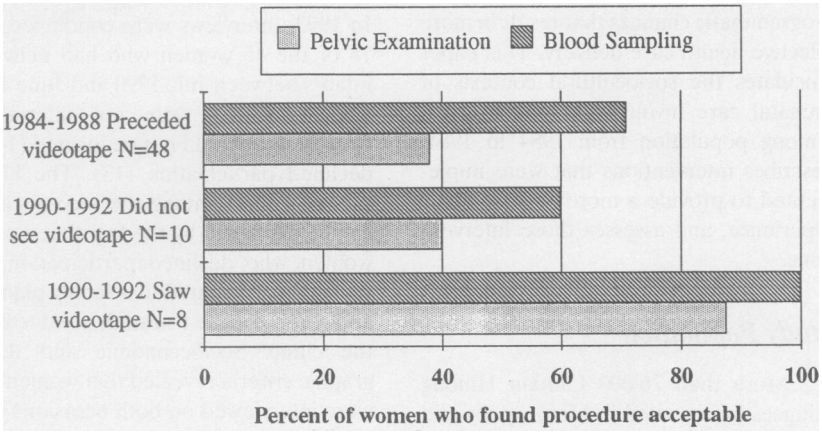

FIGURE 1—Acceptability of Hmong patients' two most objectionable prenatal clinic procedures (pelvic examination and venous blood sampling), before and after the initiation of the Hmong-language videotape.

varied among participants. To the extent that what women remember will affect their behavior, this study points to needed reforms in the delivery of prenatal care to Hmong women.

Two factors were investigated. First, Hmong have traditionally believed that illness may be of either supernatural or natural etiology. Ritual and plant therapy may be directed at external causes of illness such as spirits, weather, and frightening experiences. Illnesses of natural etiology may be treated with ingested or externally applied botanical preparations.[5–7] Because many biomedical procedures are more bodily invasive than are traditional therapies, we focused on technologies that may be barriers to full participation. Second, consideration was given to intercultural, asymmetrical social interactions within the clinic's institutional setting that may have impeded clinic attendance.

Results

1987/88 Interviews

Women were questioned about six procedures commonly performed during clinical prenatal care: blood pressure measurement, fundal height measurement, urinalysis, ultrasound, venous blood sampling, and pelvic examination. They were asked whether they knew the rationale for the procedures and whether they found the procedures acceptable. The best understood were ultrasound (90%), fundal height measurement (79%), and pelvic examination (52%), procedures that informed traditional Hmong concerns about fetal size and position.

The pelvic examination was unacceptable to a majority of women (61%), and it was the one procedure sufficiently objectionable to limit prenatal visits. More than one third (37%) of the women acknowledged their husbands' objections to clinic participation; 75% of these complaints were specifically because of the pelvic examination. The experience of a pelvic examination also provoked embarrassment and shame, which diminished the likelihood that women would inform others. Of the 23 women who had their first pelvic examination at the clinic, 15 (65%) had received no forewarning.

Women disliked the limited clinic hours (25%); the discontinuity in physician care (63%), which they associated with an increase in pelvic examinations; and medical student involvement (13%), because this entailed a further repetition of procedures. Hmong expect physicians to explain fully all procedures, but women's unwillingness to initiate inquiry encouraged physicians to be less forthcoming. Dissimilar communication styles can have another effect. The routine remarks of clinic staff concerning missed appointments and other examples of "noncompliance" are, for some, too direct and a cause for shame. Women (57%) linked the frequency of clinic visits with the quality of care that they would receive in the hospital and feared that delivery assistance would be withheld if they did not attend an obstetric clinic.

Intervention

The most notable intervention was the addition of a staff nurse-midwife who had learned some Hmong language. Pelvic examinations were reduced by all providers to one or two during a pregnancy. Institutional reforms included a new telephone system with a direct line to an interpreter and expansion of obstetric clinic services from one to two mornings a week. The research staff produced a Hmong-language patient education prenatal care videotape that acknowledges the value of traditional practices, explains technical procedures and their rationale, addresses concerns reported by women during interviews, and informs them of patients' rights.

1993 Interviews

Women interviewed in 1993 were generally more positive about their prenatal care experience and interactions with staff than were the women interviewed before the intervention. They experienced the nurse-midwife as easier to talk with, performing fewer and more gentle pelvic

examinations, and engendering less embarrassment.

Acceptability of all procedures increased among the eight women who viewed the prenatal care videotape, while the ten women who did not see the videotape mirrored the earlier group. Figure 1 shows the differences in acceptance rates of the two most objectionable procedures—pelvic examination and venous blood sampling—among those who had viewed the videotape (n = 8), those who had not viewed the videotape (n = 10), and the group of women who were interviewed in 1987/88 before the videotape was produced (n = 48). Although recall of the rationale for procedures did not increase among those who viewed the videotape, we believe that viewing the videotape was one factor that promoted greater acceptance because it addressed culture-specific concerns in the Hmong language. Other factors could have contributed in this small sample.

Half of the women interviewed in 1993 reported a new concern that had not been discussed during the 1987/88 interviews. They believed that ultrasound may induce miscarriages if performed during the first half of pregnancy. Either they or someone they knew had experienced a miscarriage following an ultrasound. Women reasoned that they could avoid this danger by delaying entry into prenatal care.

Discussion

Given the differences between biomedical procedures and indigenous medical strategies, it is not surprising that the least familiar procedures negatively affected acceptability and the willingness of women to participate in clinic programs. Furthermore, results indicate that understanding the rationale for recommendations may not necessarily be a prerequisite for following those recommendations, and, by extension, greater conformity to clinic programs may not be simply a matter of more biomedical educational outreach. Efforts were made by the clinic to discover culture-specific concerns and to develop educational materials.

Hmong assign considerable significance to interpersonal relations in assessing the value and quality of health care. Professionals need to increase their awareness of how routines are interpreted and to appreciate how adequate explanations can contribute to better patient care for Hmong women. Staff and system changes that foster more accommodating and sustained interactions between health care providers and patients need to be made. □

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